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September 16, 2022

Ms. Brinda Westbrook-Sedgwick  
Commission Secretary  
Public Service Commission 1325 G  
Street, NW, Suite 800  
Washington, DC 20005  
- By electronic mail -

**RE: RM-48-2022-01 “In The Matter of 15DCMR CHAPTER 48 – MICROGRIDS”**

Dear Ms. Westbrook-Sedgwick,

Please find enclosed reply comments by GRID2.0 Working Group to the NOPR RM48-2022-01-E. If there are any questions, please contact me.

Thank you,



Larry Martin  
GRID2.0 Working Group

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE DISTRICT OF COLUMBIA**

**In the Matter of 15 DCMR Chapter 48 – )  
Microgrid ) RM48-2022-01-E  
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**GRID2.0 WORKING GROUP  
REPLY COMMENTS IN RESPONSE TO NOTICE OF PROPOSED RULEMAKING  
RM48-2022-01-E**

Pursuant to the Public Service Commission of the District of Columbia’s (“Commission” or “DCPSC”) Public Notice published in the District of Columbia Register on August 12, 2022, the GRID2.0 Working Group respectfully submits these Reply Comments on the Commission’s Notice of Proposed Rulemaking (“NOPR”) published in the District of Columbia (“District” or “DC”) on July 8, 2022. The August 12, 2022 Public Notice requires comments to be submitted by September 7, 2022 and for reply comments to be submitted no later than 30 days after.

**BACKGROUND**

In response to the NOPR, Potomac Electric Power Company (“Pepco”), Office of People’s Counsel (“OPC”) and the District of Columbia Department of Energy and Environment (“DOEE”) filed initial comments on August 8, 2022. The NOPR proposed a new Chapter 48 to Title 15 of the Commission’s regulations (15 DCMR Chapter 48 – Microgrid). The purpose of the NOPR is to establish a new Chapter governing the regulation of microgrids in the District. This NOPR is based upon the Commission’s decisions set out in Order No. 21172 (“Order”), issued in Formal Case No. 1163, in which the Commission determined the level of regulation to impose on microgrids based on three microgrid classifications (Single Customer, Single Customer Campus, and Multi-Customer Microgrids). In particular, the Commission held that any microgrid falling within the “Multi-Customer Microgrid” classification would be subject to full public utility regulation under the District’s Public Utility Code (“DC Code” or “Public Utility Code”).

On August 1, 2022, the District Government (“DCG”) filed a Motion for Reconsideration and Clarification of Order No. 21172 urging the Commission to reconsider its determination regarding the regulation of microgrids, in particular the imposition of full public utility regulation on Multi-Customer Microgrids (“MCM”). Pepco, OPC, and GRID2.0 filed responses to the DCG’s Motion for Reconsideration and Clarification (“Motion”) on August 4, 2022.

Based on its Letter of Response, filed in support of the DCG's Motion, GRID2.0 strongly supports the initial comments filed and recommendations made by DOEE and OPC, as well as opposes certain modifications proposed by Pepco, in response to the NOPR, as discussed in further detail below. In particular, as recommended by OPC and DOEE, GRID2.0 urges the Commission to withdraw this NOPR and evolve a holistic "regulatory framework" for microgrids that addresses the benefits, costs and risks of microgrids in light of the District's mandates and policy commitments, as well as the Commission's obligations and fuller regulatory authority under the DC Public Utilities Code.

More specifically, GRID2.0 urges that framework guidance be evolved to: (1) Take into account the important role that the Commission, DOEE, OPC and other stakeholders recognize that microgrids could play in advancing the District's climate, clean energy, and energy efficiency mandates and related policy commitments, such as resiliency, and support and enable microgrid deployment; (2) Consider and balance the different relevant interests that come into play in applying the DC Public Utilities Code, as amended by Section 103 of the Clean Energy DC Omnibus Amendment Act of 2018 ("Omnibus Act" or "Clean Energy DC Act" or "Act"), for purposes of meeting those District mandates and policy commitments; (3) Propose for comment alternatives to full public utility regulation of multi-customer microgrids that are commensurate with benefits to be provided by such microgrids in the public interest, benefits that would tangibly advance the DC's mandates and policy commitments cost-effectively, as well as improve the resilient and efficient provision and consumption of electricity services in the District, while preserving and enhancing reliability, safety and affordability; and (4) Take a functions-based approach to evaluating the need for, level of and the design of regulation of microgrids, delineating criteria that have a direct nexus with achieving such outcomes as assuring common safety, customer protection and choice, and the reliability and quality of electricity service and that also take into account the physical and operating characteristics of microgrid systems.

Prior to Order 21172 (FC 1163) and this NOPR, the Commission carried out a stakeholder process in the MEDSIS/PowerPath (FC 1130)("MEDSIS") and the Microgrid (FC 1163) "Notice of Inquiry" ("NOI") proceedings that sought to weigh all relevant interests consistent with the DC Code. In contrast, this Order and the NOPR fail to draw and build upon the record and recommendations arising from that process to craft a balanced and measured regulatory framework for microgrids. Under the NOPR, the DCPSC proposes to impose wholesale public utility regulation, as specified under the DC Code, on any MCM, without exception. Under the Commission's Order, this blanket regulation solely relies upon certain limited, static and absolute factors (multiple end-use customers, multiple facilities, and multiple meters) that lack a direct nexus with assessing the need for and level of regulation to be imposed. In other words, the NOPR does not produce a functions-based regulatory framework, one that applies criteria reflecting salient functions and attributes to determine whether full "public utility" regulation is warranted, as well as takes into account the distinctive physical and operating characteristics of microgrids, as revealed in internal microgrid system transactions with customers and external interactions with the electric utility power system.

Far from “enabling” the development and deployment of microgrids in the District, by providing greater regulatory certainty and predictability, the NOPR’s categorical and summary treatment of MCM will have discriminatory effects, create significant confusion and stymie such market development, in a manner that will deprive the District of a vital tool for achieving cost-effective solutions to meet its policy mandates and commitments. Based on the extensive and rich record of the prior proceedings, GRID2.0 believes that the Commission needs to evolve a regulatory framework that will address fully and fairly the benefits, costs and risks associated with microgrid deployment, continuing to employ a stakeholder process that balances all relevant interests, consistent with the Commission’s full regulatory authority under the DC Public Utilities Code. To do otherwise, will materially limit opportunities and options for deploying innovative energy management strategies and attracting private capital in meeting the DC policy mandates and commitments.

### **SCOPE OF REGULATORY AUTHORITY**

The Commission’s analysis of its regulatory authority is confined to evaluating whether any of three general microgrid classifications would trigger the definitions of “electric company,” “electric generating facility,” and/or “electricity supplier,” under the DC Public Utilities Code. The Commission appears to be suggesting that this is the full scope of its authority to determine appropriate regulatory treatment of microgrids and that this is the only approach that it can take in determining the need for, level of and type of regulation to impose. While it is important for the Commission to address such triggers for regulation, GRID2.0 agrees with DOEE that a functional approach is needed in developing a microgrid regulatory framework, where the full scope of the Commission’s authority is brought to bear.

The Commission’s authority to “regulate” microgrids and DER is not just based on whether microgrids or DER (e.g., selling of solar PV panels to residential and commercial customers) are acting essentially as a “public utility” or technically fall within the definitions of “electric generating facility” or “electricity supplier.” As the DCPSC’s grid modernization efforts illustrate, the Commission’s authority is broader and extends to addressing the impacts of grid-connected microgrids and DERs on the utility distribution system; both adverse impacts (e.g., backflow of power into the macro-grid; voltage variances arising from renewable intermittency, etc.), and positive impacts (e.g., flexible load, demand response to alleviate binding network constraints; new distributed generation and energy storage resources to meet peak demand capacity requirements and shape/modulate load, demand flexibility management, etc.) will need to be “regulated” in order to mitigate disruptive effects and to tap into the net benefits.

As part of its grid modernization efforts, the Commission is underway in addressing both the challenges and the opportunities that DER and microgrids present for the Grid. This necessitates that the Commission recognize that such impacts are associated with technical and operating characteristics that are quite different from central power sources, calling for the development of new methods of data analysis, resource valuation, modelling and forecasting appropriate to the characteristics and impacts of these new resources. Therefore, as DOEE

emphasizes, it is important to differentiate microgrid systems from a “public utility,” in terms of how these distinctive technical and operating characteristics affect the functioning of microgrids with respect to their customers and interactions with the electric power system. As discussed later, the NOPR fails to make such distinctions and, as a result, creates significant confusion as to how MCMs will function as a “de facto” public utility vis a vis its customers and the public electric utility.

Importantly, in moving towards a more “distributed energy future” to meet the District’s mandates and the DCPSC’s grid modernization objectives, the Commission is not only addressing the impacts (adverse and positive) of DER and microgrids on the electric power system, but also addressing grid modernization measures to “integrate” these resources into utility planning, investment, procurement and operations. For example, during the MEDSIS Stage 2 proceeding, parties recognized the validity of DOEE’s observation that the “level of grid modernization” necessary to achieve the District’s clean energy, climate, resiliency and energy efficiency goals will require the Commission to develop an “integrated distribution resource planning” framework to guide and assure that “the utility’s planned investment decisions are aligned with the District’s priorities.” As DOEE stated, such a framework “will tie together Grid planning, DER integration, Non-Wires Alternatives (“NWAs”), smart grid investments and forecasting of both load and DER, in a manner that can both reduce cost to ratepayers and improve efficiency and reliability, all while driving towards achieving the District’s climate goals as embodied in the Clean Energy DC Omnibus Amendment Act (2018) and the Clean Energy DC Plan (all DOEE’s comments in response to DCPSC Order No. 19984 (FC1130-2019-M-487, p.3). As DOEE explained in its MEDSIS comments, a “strategic phased plan” for evolving an Integrated Grid would maximize the cost-effective use of Distributed Energy Resources (DER) and Microgrids for “the benefit of the Grid and District of Columbia residents and businesses” (p.12 -13 of DOEE’s comments).

In line with DOEE’s comments on the NOPR, GRID2.0 maintains that the approach taken in the NOPR in imposing blanket “public utility” regulation upon MCMs totally fails to take into account broader obligations of the Commission under the DC Public Utilities Code, obligations that motivated the Commission to oversee the “Modernizing Electric Delivery System for Increased Sustainability” (“MEDSIS”) proceeding. Such broader obligations should help to shape the design of regulation with respect to microgrids in order to provide appropriate customer protections, assure standards for common safety and reliability of service, while also addressing the District’s policy mandates and taking into account the unique physical and operating characteristics of microgrids and how microgrids can serve the electric power system as a Grid resource.

In addition, in its Order and NOPR, the Commission does not seek to examine provisions within the DC Code that can help to shape how the Commission regulates microgrids and especially MCMs. For example, pursuant to District of Columbia Code Section 34-1504(d), the Commission can adopt an alternative form of regulation if the Commission finds that the alternative form of regulation: (A) protects consumers; (B) ensures the quality, availability, and reliability of regulated electric services; and (C) is in the interest of the public, including

shareholders of the electricity company (“DC Code requirements”). Contrary to the approach taken in the Order and NOPR, both the MEDSIS and NOI proceedings sought to address microgrid regulation in a functional manner, as reflected in the MEDSIS Consensus Recommendations and well over a majority of the NOI comments. Therefore, GRID2.0 maintains that this DC Code provision would allow the Commission to mold DC Code compliant regulation of MCMs, that both takes into account the distinctive physical and operating characteristics of microgrids and how microgrids can provide vital services to the Grid within the process of Grid modernization and transitioning to a clean, distributed energy future.

Furthermore, the Clean Energy DC Omnibus Amendment of 2018, which amends D.C. Code § 34 – 808.02, imposes a specific charge on the Commission. Section 103 of the Act expands the role and responsibilities of the Commission in addressing climate change and the District’s policies relating to GHG emissions reduction, clean energy technology deployment, climate change, increasing renewable energy in the generation mix, significantly improving building energy efficiency, and requiring transportation electrification, stating: “In supervising and regulating utility or energy companies, the Commission shall consider the public safety, the economy of the District, the conservation of natural resources, and the preservation of environmental quality, including effects on global climate change and the District’s public climate commitments.

GRID2.0 believes that the Commission should discuss more fully the scope of its authority in connection with exercising its discretion to develop a microgrid regulatory framework. The need to harness the net benefits of DER and Microgrids has become ever more imperative since the Clean Energy DC Act, which builds upon existing commitments by the District to meet the climate goals of the Paris Climate Accord, required that District GHG emissions be reduced by 50% by 2032, and carbon neutrality be attained by 2050. The Act also strengthens the District’s energy efficiency efforts with the goal of reducing DC energy use by 50% by 2032 from a 2012 baseline under the Sustainable DC Plan. While the Commission noted the importance of microgrids in meeting such goals, the DCPSC failed to describe and evaluate its authority to modernize the Grid, its ability to fashion alternative regulation and its obligation to assess, in connection with its decision-making and oversight, effects on global climate change and the District’s public climate commitments. The DCPSC’s decisions, embodied in its Order and NOPR, were reached without the benefit of examining such authority.

As with DOEE and OPC, GRID2.0 maintains that, within this broader scope of authority, the Commission could fashion more tailored, alternative regulation of microgrids that still meets the DC Code’s basic requirements as discussed above. There was a consensus among the MEDSIS participants that microgrids “do not fit comfortably” within the existing definitions of the DC Public Utilities Code. For these reasons, GRID2.0 supports OPC’s recommendations for a more prudent and measured approach to microgrid regulation than the NOPR’s blanket public utility regulation. As with OPC, GRID2.0 believes that the Commission should take a case-by-case approach, where the Commission delineates a “factor test,” as other jurisdictions have done, to assess when a microgrid is essentially operating as a “public utility.” If the Commission followed such best practices, the “factor test” would directly link to the salient functions and

attributes of a “public utility” rather than relying solely upon limited, static proxies such as, multiple customers, multiple facilities and multiple meters, that do not relate directly to the essential functioning of a public utility. In this way, the Commission could develop a body of knowledge upon which to determine whether and how to design “Light Regulation” that has been raised by DOEE and discussed in the MEDSIS proceeding and the NOI. By pursuing this alternative process, the Commission would not forego prematurely the ability to capture valuable net benefits that microgrids can offer, and could explore ways other than blanket regulation for applying comparable protections, safeguards and standards. In this way, the Commission also would leave open the opportunity for customers (including communities with their governance structures) to pursue new and innovative business models, such as “Energy as a Service,” and have access to and benefit from continuous technology advancements that could not only meet their specific requirements and needs, but also the needs of the electric utility system and society.

### **POLICY MANDATES AND COMMITMENTS**

The stringency of the District’s clean energy, climate and energy efficiency targets and timetables would seem to caution the Commission to evaluate carefully the need for and type of regulation for microgrids, drawing upon the extensive MEDSIS and NOI records, rather than imposing from the outset blanket regulation that is likely to materially limit opportunities and options for customers that the DC public electric utility serves. The stringency of the District’s goals and the timeframes within which they must be attained make clear that the District Government and the Commission will need to harness new tools and resources, in addition to conventional ones, in order to achieve these objectives cost-effectively and equitably.

Imposing blanket regulation will also likely materially affect the Commission’s and the public electric utility’s ability to maximize the potential value of microgrids in meeting the electric power system’s evolving requirements and needs as the District moves towards higher penetrations of DER, increased volumes of intermittent renewable energy and decarbonization. As with DOEE and OPC, GRID2.0 questions why, at this stage, the Commission should seek to “lock in” the way in which microgrid development takes place by “locking in” the application of one business model, the utility business model, in connection with the deployment of MCM, while microgrid technologies are ever-evolving and microgrid systems have been successfully employing innovative business models that are not based on the Utility revenue model. Moreover, across Commission proceedings, the focus has been on pursuing the most cost-effective solutions and, towards that end, assessing alternative scenarios and regulatory innovations such as “Non-wires alternatives” to conventional investment options. Rather than imposing blanket regulation from the outset, other jurisdictions, with comparable Public Electric Utility Codes and policy mandates, have been developing “Microgrid Initiatives” and “Microgrid Programs” to undertake sandbox demonstrations that can generate lessons learned to better inform their decision-making (for example, Connecticut, Massachusetts, New York, California).

Taking a staged, prudent and measured course of action would help to advance the Clean Energy DC plan and the Resilience plan in which DOEE identifies microgrids as important solutions for meeting the District's rigorous targets and timeframes. DOEE highlighted the vital role that microgrids can play in connection with implementing both plans, based on distinctive functionalities that microgrids can perform. In supporting sandbox demonstrations, the Commission could promote microgrid projects that strategically align vital stakeholder interests, including DC communities (building partnerships between microgrid developers, Pepco and communities), as well as strategically site microgrids to cluster comparable loads (especially critical loads), optimize asset management and configure and equip microgrids to cost-effectively further both net-zero and resilience strategies. Such an approach would enable microgrid development in the public interest.

### **MICROGRID SYSTEMS AS FUNCTIONAL AND ENABLING TECHNOLOGIES**

If the DCPSC does not address the distinctive physical and operating characteristics of "microgrids" in determining the need for regulation and the appropriate level of regulation to apply to microgrids, the regulation will have discriminatory effects and deprive District customers, including DC communities and the District Government, of the opportunity to choose options and solutions that can meet their particular needs, requirements, interests and expectations reliably, efficiently, safely and affordably. Such effects would run counter to the Public Utility Code's requirements that regulation assure the quality, availability, and reliability of electricity services and protect customers in the public interest. Resolving legal issues surrounding the type of regulation of microgrids that "fall" within the definition of "electric company" under the DC Code by imposing blanket regulation on MCMs (the same specifications and requirements as the public utility distribution system), will have the effect of "converting" microgrids into "electric companies" that focus on the delivery of bulk electric power rather than offering customers/communities alternative services with technologies that are widely available to meet customized needs and requirements, including building the resilience and sustainability of disadvantaged communities suffering from excessive outages.

Grid2.0 maintains that any microgrid regulatory framework needs to take into account the value that a "microgrid system" as a "single controllable entity" can contribute to attaining District mandates and DCPSC grid modernization objectives. Unlike a "Virtual Power Plant," or a portfolio of "aggregated" Distributed Energy Resources (DER), a microgrid is a small-scale energy "system," capable of balancing in real time captive multiple supply, demand and storage resources to maintain stable service within its defined boundary. Designed to meet local energy requirements, microgrids can provide coordinated control to optimize dynamic sets of distributed and intermittent resources within an integrated, autonomous system, using specialized hardware and software to manage such integration. In this way, varying load is intelligently and effectively managed and shaped through orchestrating multiple distributed energy and demand-side assets, generating outcomes that are greater than the sum of the individual components of the microgrid system. As a result, a microgrid can provide cost-effective control of disparate, local distributed resources as they continue to proliferate in the



market, yielding increased electricity service performance at lower costs: Enhancing DER value; Reducing burdens on the Macro-grid; Alleviating electricity system network constraints and expanding hosting capacity; Providing needed flexibility to address the effects on the Grid of renewable variability and imbalances between market supply and demand; Enhancing, through local control and optimal infrastructure to meet local energy requirements (power, heating and cooling), power quality, the availability of diverse resources, reliability/resiliency, efficiency, sustainability within communities; and Offering “heterogeneous” services to meet customized customer needs. Grid2.0 maintains that the “interactive effects” of microgrid systems need to be taken into account in assessing the costs and benefits of the contributions that microgrids can deliver to the Macro-grid, communities and markets.

Thus, microgrid systems can offer “localized” integrated energy solutions that go beyond the “pairing” of discrete resources and are distinctive from aggregating combinations of bulk resources -- generating efficiencies, consistent with reliability and resilience, that can place, in turn, more efficient demands on the Utility distribution system. These physical and operating characteristics/functionalities, which are unique to “microgrids” and distinctive from the physical and operating characteristics of a “Utility Distribution System,” would be substantially eroded if MCMs are required to meet virtually the full gamut of Utility distribution system requirements under the DC Code, irrespective of whether the microgrid is providing reliable, safe and affordable electricity services to meet specific customer needs and requirements and providing robust protections and safeguards to its customers. For these reasons, GRID2.0 supported the consensus MEDSIS Microgrid Recommendations that sought to apply appropriate regulations to microgrids to assure that they provide reliable, quality and safe services, as well as robust customer protections (even at the level of public utility regulation where appropriate), but tailored to the nature and functions of microgrids. The MEDSIS participants all recognized that microgrids can be crucial “local engines” for leveraging the value and energy savings that end-use customers could bring to implementing DC’s clean energy transition.

Moreover, the functionalities that microgrids can uniquely contribute to attaining the District’s and the Commission’s mandates are being enhanced by advancements in information, communications and power control technologies, as well as developments in data management and analytics, machine learning and artificial intelligence (“smart technologies”). Empowered by these smart technologies, microgrids are increasingly offering new ways to meet 21st century demands in connection with the utility power system, customers, communities and markets. Already, microgrid (with microgrid controllers, control and communications hardware/software) are being integrated into the management of EV fleet charging, Vehicle to Grid and Building to Grid—readiness strategies and pilots.

## **FC 1130 MEDISIS – POWER/PATH AND FC 1163 NOI PROCESS**

### ***PROCESS, RECORD AND RECOMMENDATIONS***

There is a fundamental difference in the approach taken by the Commission in its Order and the NOPR and the approach discussed during the MEDSIS and NOI proceedings. All of these proceedings addressed the need for and level of regulation to apply to microgrids. However, the MEDSIS and the Commission's NOI went further to focus on what type of regulation would be appropriate and how to design regulatory requirements to fit the unique physical and operational characteristics of microgrids that provide customized, integrated energy and resource solutions to meet specific customer requirements, including business/industrial parks, local governments, military bases, data centers, etc. In contrast, in its Order, the Commission asserted that once a microgrid falls into the "MCM classification," virtually the full gamut of regulatory provisions that apply to Pepco would apply to MCMs. Unlike the MEDSIS process and the NOI, the Commission did not consider at all how to calibrate public utility regulatory requirements/standards/codes to fit the nature and functions of microgrids. Also, in contrast to the other forums, the Commission based such regulation solely on the limited factors of multiple customers, multiple facilities and multiple meters, rather than taking a functional approach that delineates factors with a direct nexus to desired outcomes. Unlike the MEDSIS and the Commission's NOI processes, the DCPSC in its NOPR and Order did not embrace the best practices of other jurisdictions/States that have developed "factor tests" to evaluate when any entity is operating essentially as a "public utility" or when it would be appropriate to apply light regulation to microgrids. These States have not relied solely upon general Utility Code definitions, without further interpretation, nor general classifications such as the microgrid classifications upon which the Commission relied to trigger blanket public utility regulation of microgrids. Finally, unlike the MEDSIS and NOI processes, the Commission did not consider at all alternative forms of regulation, including commercial regulation, or address "safe harbors" for certain MCM scenarios, especially where the microgrid systems are fulfilling public purposes.

In contrast to its usual practice, the Commission did not take up the MEDSIS Consensus Recommendations or the NOI stakeholder comments in reaching its decisions. Nor did the Commission seek to identify and balance various interests relating to the achievement of the District's legislative mandates and policy commitments and relating to enabling microgrid deployment in furtherance of such objectives.

In the MEDSIS process, for example, there was a consensus that there are too many variances from general microgrid classifications to rely on such general and vague "classifications" to determine whether and how to apply public utility regulation. The consensus Recommendations of the Microgrid Working Group also reflect the group's position that "microgrid systems" do not fit comfortably into any of the DC Public Utility Code definitions (electric company; electric generating facility; electricity supplier). The Microgrid Working Group even raised a consensus recommendation for developing a new classification for a "Microgrid Operator" for the Commission to consider.

While in its Order, the Commission opines that its decision to impose virtually the full gamut of public utility regulation on MCMs is akin to the MEDSIS Recommendations, that is not the case. Even the Recommendation addressing sectionalization or usage of utility distribution

infrastructure only recommended that utility-level quality of service regulation should apply, not full public utility regulation.<sup>1</sup> MEDSIS inputs and NOI comments also urged that the net benefits provided by microgrids should be taken into account in determining the need for regulation and shape the appropriate level and design of regulation. Much time was also spent in evaluating the need for a safe harbor, especially with respect to microgrids that can fulfill public purposes against performance metrics, such as “Resilience Hubs.” The MEDSIS process also evaluated circumstances under which comparable forms of regulation to utility regulation would adequately meet desired outcomes, such as commercial regulation, building/construction/electrical codes and standards, and governance structures.

In its NOI, the Commission stated that, “For microgrids that may fall under our regulatory authority, the threshold question is whether and to what extent we should employ a different paradigm such as “lightened regulation” or “light touch or light-handed” oversight to facilitate deployment. These terms are used interchangeably to refer to exempting a microgrid from traditional Commission regulations such as keeping accounts, records and books, from making annual reports, and from filing rate schedules and tariffs. Therefore, to better understand the benefits, or potential impacts, that microgrids bring to the customers they serve or the distribution system as a whole and the appropriate regulatory framework for microgrids, we invite interested persons to comment on the following questions:”<sup>2</sup>

The Commission also stated in its NOI that, “Due to the vast differences in how microgrids are used, the question of whether we have jurisdiction to regulate a particular microgrid as a public utility necessarily turns on the individual circumstances of each case.”<sup>3</sup>

Given the nature of the processes leading up to the Commission’s decision-making, the rigorous targets and timetables facing the District, and the Commission’s charge under Section 103 of the Omnibus Act, GRID2.0 believes that the Commission needed to explain more fully the rationale for its particular approach and why the Commission did not find any of the recommendations and comments arising from the MEDSIS and NOI processes to be persuasive.

### ***BALANCING VARIOUS INTERESTS***

In its Order and NOPR, the Commission does not explain how blanket public utility regulation of MCMs will “enable” microgrid deployment in furtherance of the District’s legislative mandates and policy commitments. Nor does the Commission address its charge under Section 103 of the

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<sup>1</sup> Formal Case No. 1163, Notice of Inquiry, at page 1; see, Recommendations referenced such as, Recommendation: If the microgrid has existing or new utility distribution assets, then the microgrid operator should be subject to electricity quality of service standards parallel to the standards applicable to electric companies as outlined in Title 15 of the DCMR; Recommendation: All microgrids should be held to existing safety and performance standards; Recommendation: Microgrids serving multiple customers should be subject to Commission regulations addressing customer protections and customer rights and responsibilities that apply to electricity suppliers, etc.

<sup>2</sup> Formal Case No. 1163, Notice of Inquiry, July 17, 2020, at page 5.

<sup>3</sup> Id. at page 2.

Omnibus Act, as it amended the DC Public Utilities Code, or consider the Code’s allowance for alternative forms of regulation, in evaluating the appropriate form and scope of regulation to be applied to microgrids that may fall under the Commission’s regulatory authority.

In light of the various relevant interests and objectives facing the Commission, GRID2.0 queries why the Commission did not decide upon a “case by case” approach to evaluating whether a microgrid is operating as a “public utility,” applying functional factor tests, as used by other jurisdictions; or whether light regulation of a microgrid is appropriate based on criteria similar to what has been applied in other jurisdictions.

### ***SCOPE AND FORM OF REGULATION BASED ON FUNCTIONAL CRITERIA WITH DIRECT NEXUS TO OUTCOMES TO BE ACHIEVED***

The Commission’s NOI references “factor tests” that States have used to evaluate whether a microgrid is operating essentially as a “public utility” or whether light regulation of a microgrid would be appropriate.<sup>4</sup> These tests reflect a functional approach to determining the need for and level of regulation to apply to microgrids. The criteria developed by the States relate directly to salient functions and attributes of a “public utility” or have a nexus with desired outcomes (common safety, consumer protections, reliability and quality of electricity service, etc.) This contrasts with the Commission’s decision to rely solely upon the definition of terms in the DC Utility Code and general microgrid classifications, without further interpretation. GRID2.0 agrees with DOEE that a functional approach to microgrid regulation is needed, especially in light of significant changes that have taken place in the electricity sector that were not taken into account or anticipated when the DC Public Utilities Code was enacted. GRID2.0 also agrees with OPC that a “case-by-case” evaluation of microgrids, based on well-delineated factors, would be a preferable step to blanket public utility regulation.

### **CLEAN ENERGY TRANSITION AND GRID MODERNIZATION**

The MEDSIS proceeding recognized the changes that the electric sector is undergoing and the transitioning process that needs to take place in order to remove disincentives to modernizing the Grid and to re-align utility financial incentives with the District’s and DCPSC’s policy objectives. These new objectives aim to:

- Rely more heavily upon renewable energy and distributed energy resources,
- Engage customers to participate in meeting power system needs,
- Harness market forces to increase the efficient allocation of resources and enhance efficient energy usage and investment decision-making;

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<sup>4</sup> Id. at page 3, see for example, the factor test applied by the Maine Public Utilities Commission to determine whether a microgrid is devoted to serving the public (utility) or particular individuals (microgrid); or the factor test used by the New York Public Service Commission to determine appropriate standards for applying light regulation to a business park.

- Forge an Integrated Grid that is adaptive to continuous change and fosters continuous improvements.

The approach taken by the Commission to addressing the need for and appropriate level of regulation for microgrids that may fall within the Commission’s regulatory authority did not take into account the significant technology, policy and market changes that are re-shaping the electric sector and compelling grid modernization. Microgrids are at the center of such changes, as microgrids are distributed energy systems, as well as technologies that enable the control and optimization of distributed resources that comprise the microgrid system. The Commission, however, did not account for microgrids as a customer choice or Grid resource in the type of regulation that it determined for MCMs. GRID2.0 agrees with DOEE that a function-based approach to determining microgrid regulation would better take these factors and considerations into account and allow the Commission to fashion a framework/roadmap in which microgrid functionalities can complement and supplement the functionalities of the Utility Distribution System as part of evolving an Integrated Grid that can effectively tap into DER.

### **NOPR AND TECHNICAL REQUIREMENTS FOR FULL PUBLIC UTILITY REGULATION**

Overall, the NOPR makes quite clear that, as the MEDSIS Consensus Recommendations reflect, microgrids do not fit comfortably within a DC Code Pepco Regulatory Framework that is, as DOEE put it, “retrofitted” onto MCM and other classifications of microgrids. The NOPR shows the difference between imposing standards and requirements equivalent to utility-level requirements for safety and performance, customer protection and choice, and the quality and reliability of electricity services; and literally retrofitting Pepco Code requirements on MCMs and other microgrids and Chapter 48 does. As GRID2.0 discusses below, (and for all of the reasons discussed above) “retrofitting” Pepco regulatory requirements on MCMs and other types of microgrids opens up considerable and weighty legal and practical issues rather than cultivating a more certain and predictable regulatory environment.

Basing regulation of MCMs solely upon the general classification (multiple customers; multiple facilities; and multiple meters) has resulted in, as DOEE observes, the wholesale application of the DC Code’s Regulatory Requirements for an “Electric Company” being imposed on MCMs. This raises innumerable questions, both legal and practical issues, about the implementation of the Pepco Regulatory Requirements with respect to MCMs, as both DOEE and OPC have pointed out in their initial comments. By imposing the full Pepco Code requirements, rather than comparable/equivalent standards (with respect to common safety, customer protections and quality of electricity services), this approach, as DOEE indicates, has the effect of eroding important distinctions between a “multi-customer microgrid” and a “utility distribution system” in terms of respective physical and operating characteristics and their functionalities (Pepco as part of the bulk power system architecture and value chain; the MCM as a distributed energy system), while creating a special position for Pepco in the electric sector marketplace.

It is unclear, for example, whether a MCM that becomes subject to the DC Code Pepco Requirements as an “electric company” will assume a monopoly service territory under the same “regulatory compact” as Pepco, or continue to be subject to competition. The “Non-Discriminatory” clauses of the Code conflict with a microgrid’s focus on offering customized services to customers with localized energy requirements and needs (whether in the case of a community facing outages; a business/industrial park seeking to achieve sustainability objectives cost-effectively; or a multi-customer microgrid designed to achieve a particular public purpose (rehabilitating a disadvantaged community; or meeting DC Government requirements)). For this reason, GRID2.0 agrees with other stakeholder that requiring a MCM to provide services to “customers in the vicinity” of the microgrid is vague and problematic. Unless, MCMs are expected to become “Utility Distribution Companies,” GRID2.0 believes that, given the nature of these projects, MCMs should be able to disclose upfront the parameters of a particular project to make clear the objectives and technical approaches and considerations and then allow for customers to “opt-in” or ‘opt-out” under terms and conditions that apply fairly to such customers.

GRID2.0 agrees with both DOEE and OPC that it is very unclear how applying the “Pepco Regulatory Framework” under the DC Code will affect not only transactions of the MCM with its customers, but also its interactions with Pepco (for example, interconnection (connecting and disconnecting as a Distributed Resource, not an Electric Company); interactions beyond connecting and disconnecting as a Grid Resource, not an Electric Company; or converting to an Electric Company in functionality from Microgrid Functionalities, etc.).

As with DOEE, GRID2.0 is very concerned about the ratemaking/KW/hr tariff-setting requirements that will eliminate the ability of MCMs to continue to deploy such innovative business models as “Energy as a Service” and to pursue innovative energy management strategies, terms and conditions that are negotiated with customers who voluntarily seek certain services to meet their particular needs and expectations. Customers voluntarily and intentionally chose microgrids as an alternative solution to the Utility “Cost of Service” Revenue Model to receive services and benefits that the utility is unable to deliver. Applying the “Pepco Regulatory Framework” under the DC Code directly conflicts with the major reason that customers seek microgrid solutions and will materially limit customer options and opportunities to choose what they need versus bulk electric services provided by a Utility Distribution Company.

As DOEE, OPC and Pepco point out, the use of the term “customer” becomes quite confusing within the Chapter 48 microgrid context. GRID2.0 would agree that it would be preferable to refer to “microgrid customers” if that was intended; but GRID2.0 also advises the Commission to clarify the relationship and interactions between the MCM and Pepco as a result of applying the Chapter 48 “electric company” framework to MCMs. This was not addressed at all in the Commission’s Order nor in the NPRM, which only set out the regulatory text copying from the Pepco provisions.

GRID2.0 agrees with DOEE that the text of Chapter 48 (as for example with respect to the “selling of excess power” by single campus microgrids) would restrict their ability to engage in the wholesale market, directly or through aggregators, as well as to provide Grid services. If this is the case, GRID2.0 seeks an explanation as to why the Commission is imposing such restrictive provisions and the extent of such restrictions on microgrids. Such clarification as to the need for and validity of such restrictions is vital in light of the grid modernization efforts that the Commission has been undertaking.

Since the Commission is seeking to provide greater regulatory certainty and predictability to enable microgrid investments, GRID2.0 agrees fully with DOEE’s comments regarding the need for the Commission to address explicitly not only Pepco’s ownership of generation assets within a microgrid, but ownership of microgrid controllers/related hardware and software that control, operate and dispatch the generation assets within these “single controllable” microgrid systems. The microgrid controller and related software/hardware are integral to operating the microgrid system as a “single controllable entity.” In this regard, there has been confusion in the recent past concerning Pepco’s right to own such assets. Therefore, GRID2.0 agrees with DOEE that the Commission should make clear that Pepco cannot own either microgrid generation assets or the microgrid under DC law. Like DOEE, GRID2.0 maintains that Sections 4800.1 and 4801.4 should be deleted.

As with DOEE, GRID2.0 opposes Pepco’s proposed modifications that would just add greater complexity and costs to the Chapter 48 requirements. For example, GRID2.0 agrees with DOEE, that the Commission should not approve Pepco’s recommendation to add, “serve a common purpose” to the definition of the “Single Customer Campus” microgrid classification. GRID2.0 believes that this is totally unnecessary given the circumstances of “campus” microgrid development on properties owned and controlled by the host customer/microgrid owner. The Commission has already determined that such microgrids are not subject to the Commission’s regulatory authority

Like DOEE, GRID2.0 also opposes Pepco’s recommendation that the Commission exempt from regulation a MCM if Pepco owns, operates and maintains the distribution poles and wires within the microgrid. In that case, Pepco states that that the microgrid and its customers will enjoy the reliability of the Pepco system and the familiarity of its practices. Moreover, Pepco observes that the Microgrid Operator will not be subject to the extensive requirements of being considered an “Electric Company.” Pepco states that, in effect, the MCM would be treated as a “Single Customer Campus Microgrid.” In GRID2.0’s view, Pepco’s recommendation proves our point that the “extensive requirements” imposed by the proposed Chapter 48 are unduly burdensome and not necessary to assure the desired outcomes, performance and protections. This is why, in connection with the MEDSIS process, all of the consensus Recommendations focused on the requisite standards, level of protection and quality of service to be applied and none of them recommended retrofitting the full panoply of DC Code “Electric Company” requirements on MCMs. The clear consensus was that the standards, protections, quality of service, etc. should fit the physical and operational characteristics of a microgrid and the nature of the services it provides as a distributed energy system. The extensive requirements to which

Pepco is subject were viewed as excessive because they are fashioned to the functionalities of a Utility Distribution System, which is devoted to providing services to the public at large within its service territory. As the track record of innumerable microgrids demonstrates, utilities are not uniquely qualified to provide energy assurance, reliability and resilience services to customers, especially during major outages.

GRID2.0 urges the Commission to include in Chapter 48 a provision addressing exemptions from Chapter 48 regulatory requirements, not just on a case-by-case “waiver” basis, but also where laws are enacted, government agency or commission regulatory directives are issued that allow for such exemptions; and, also, in the case of sandbox demonstrations supported by the Commission. GRID2.0 also recommends that MCMs be exempted from Chapter 48 requirements when projects are undertaken under the oversight and in coordination with the DC Government and DC Wards, where such projects are subject to the requirements of general solicitations or particular procurement actions, initiatives or programs (especially MCM projects undertaken under DC Government or Ward oversight and supervision with respect to disadvantaged communities; and MCM projects (projects that apply to multi-customers, multi-meters and multi-facilities) undertaken to provide energy surety and critical infrastructure protection during energy disruptions, emergencies and major outages).

GRID2.0 agrees with DOEE that the NOPR raises legal and practical issues regarding how this Chapter 48 affects small generator interconnection under the Code and Commission regulations. Chapter 48, by itself, renders unclear the status of MCMs vis a vis Pepco, leaving open for interpretation whether the regulated MCM is a “customer” of Pepco or an “electric company” counterpart. This necessarily needs to be addressed and clarified by the Commission, consistent with its grid modernization efforts and consistent with its efforts to implement the Omnibus Act, and DOEE’s Clean Energy DC, Resilience and Sustainability DC Plans.

#### **ELEMENTS FOR A HOLISTIC REGULATORY FRAMEWORK BASED ON THE MEDISIS AND NOI PROCESS, RECORD AND RECOMMENDATIONS**

For all of the reasons elaborated upon above, GRID2.0 recommends that the Commission withdraw this NOPR and resume the process started by MEDSIS and continued by the NOI to evolve a holistic regulatory framework that takes into account the distinctive physical and operating characteristics of microgrids and the benefits that microgrids can contribute to advancing the District’s legislative mandates and policy objectives.

GRID2.0 believes that the regulatory framework should address/include the following elements:

#### ***DISTINGUISHING “MICROGRIDS” FROM “PUBLIC ELECTRIC UTILITIES”***

In light of all of the questions and issues evoked by the NOPR/Chapter 48, it is necessary to distinguish microgrids from Utility Distribution systems. It is one thing to hold microgrids to



high standards, but it is another to impose the full panoply of “Electric Company” requirements when a microgrid is not structured or devoted to servicing the public at large. The Commission needs to address the distinctive capabilities that microgrids bring to attaining District policy goals and mandates, consistent with evolving an Integrated Grid where microgrids as a Grid resource are integrated into utility planning, investment/procurement and operations.

In particular, microgrids are engines of localization that can offer customers customized services, maximizing benefits and minimizing costs through innovative energy management strategies and business models.

### ***PRINCIPLES/GUIDANCE TO GOVERN REGULATORY TREATMENT OF MICROGRIDS***

The framework should start by setting out the MEDSIS Vision Sustainability Principles and then develop principles specific to governing the microgrid regulatory framework. Again, these principles should take into account the unique physical and operating characteristics of microgrids, their role in grid modernization and clean energy transitioning, and their role in building community sustainability and resilience.

### ***DISTRICT POLICY MANDATES AND COMMITMENTS AND BARRIERS TO MICROGRID DEPLOYMENT***

In connection with the attainment of the District’s legislative mandates and policy commitments, the regulatory framework should especially align the role of microgrids with DOEE Plans (Clean Energy DC, Resilience, Sustainability DC), Programs and Initiatives. Moreover, the framework should explicitly discuss barriers to microgrid deployment and potential alternatives for overcoming such barriers, consistent with the DC Public Utilities Code. In this regard, the framework should draw from the record/comments/inputs provided in Stage 1 of the MEDSIS process.

### ***SCOPE OF COMMISSION’S AUTHORITY TO REGULATE MICROGRIDS AND ACCOMMODATE CHANGE***

Development of a microgrid regulatory framework should be placed within the context of the DCPSC’s authority, agenda and efforts relating to grid modernization, clean energy, climate, energy efficiency, resilience. GRID2.0 recommends that the Commission tap into its full regulatory authority to evaluate alternatives and capitalize on regulatory innovations that it is pursuing to transition to a new regulatory paradigm for a distributed energy future.

### ***MAIN REGULATORY AREAS TO ADDRESS BASED ON A FUNCTION-BASED APPROACH***

*CRITERIA FOR CASE-BY-CASE EVALUATION: OPERATING AS A “PUBLIC UTILITY;” AND LIGHT REGULATION* (See, the best practices of States, some of which were referenced in the Commission’s NOI; criteria should be functions-based and have a direct nexus with the desired objectives).

*LIGHT REGULATION FRAMEWORK AND MICROGRID PERFORMANCE STANDARDS*

*ADDRESSING TRANSACTIONS/INTERACTIONS WITHIN MICROGRIDS CONNECTED TO THE  
MACRO-GRID*

*ADDRESSING TRANSACTIONS/INTERACTIONS BETWEEN MICROGRIDS AND THE MACRO-  
GRID*

*SANDBOX DEMONSTRATION PROJECTS TO ADDRESS DISTRICT PLANS AND PROGRAMS TO  
MEET DISTRICT LEGISLATIVE REQUIREMENTS AND ALSO MICROGRID INTEGRATION AS A  
GRID RESOURCE*